



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,038	01/17/2002	Dong Tian	A148 1599.1	1256

112 7590 01/26/2005

ARMSTRONG WORLD INDUSTRIES, INC.  
LEGAL DEPARTMENT  
P. O. BOX 3001  
LANCASTER, PA 17604-3001

EXAMINER

REDDICK, MARIE L

ART UNIT	PAPER NUMBER
----------	--------------

1713

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/052,038	Applicant(s) TIAN, DONG	
	Examiner Judy M. Reddick	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11/04/04 & 12/16/04.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3,6-8,25,26,28-31,33,34 and 36-42 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1,3,6-8,25,26,28-31,33,34 and 36-42 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 04, 2004 has been entered.

Response to Amendment

2. The amendment filed on 11/04/04 under 37 CFR 1.114 is sufficient to overcome a portion of the objection to the specification under 35 USC 132 relative to the new matter issue introduced by "UCAR Waterborne VINYL AW-845 (Union Carbide)", Office Action of 08/04/04, paragraph nos. 2 & 3 & the Claim Objections, Office Action of 08/04/04, paragraph no. 4.

Specification

3. The amendment filed 05/25/04 stands objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material that is not supported by the original disclosure is as follows: a) "the moieties pendant from the backbone of the polyvinyl chloride polymer are alkoxy esters", per the paragraph bridging pages 4 & 5. The amendment filed 11/04/04 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. The added material not supported by the original disclosure is as follows: a) "chloride or a carboxylic acid-containing vinyl polymer", per the paragraph bridging pages 4 & 5.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

4. Claims 1, 3, 7, 8, 25, 26, 28-31, 33, 34 & 39-42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As far as the Examiner can tell, no support can be found for the following limitations: a) "at least one plurality of polymeric particles", "at least one plurality of colored particles" & "at least one plurality of hard particles" per claims 1, 25, 28 & 33; b) "the polyvinyl backbone of the polyvinyl chloride resin consist of ester pendant groups selected from the group consisting of an alkyl ester, alkoxy ester, carboxylic acid-containing ester" per claims 1 & 39, c) "the polyvinyl chloride resin

Art Unit: 1713

consist of ester pendant groups selected from the group consisting of ----carboxylic acid-containing esters----" per claims 25 & 40, "the polyvinyl chloride resin is selected from the group consisting of ----chloride and carboxylic acid-containing vinyl polymers----" per claims 28 & 41 and d) "the polyvinyl chloride resin consists of monomers selected from the group consisting of ---carboxylic acid-containing vinyl monomers----" per claims 33 & 42. This, as such, engenders a New Matter situation.

## Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 3, 7, 8, 25, 26, 28-31, 33, 34 & 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) The recited "plurality of polymeric particles", "plurality of colored particles" & "plurality of hard particles" per claims 1, 25, 28 & 33 constitutes indefinite subject matter as per the metes and bounds of such engenders indeterminacy in scope. There are two separate requirements set forth in the § 112, second paragraph: (A) the claims must set forth the subject matter that applicants regard as their invention; and (B) the claims must particularly point out and distinctly define the metes and bounds of the subject matter that will be protected by the patent grant. See M.P.E.P. § 2171.

B) The recited "at least one" and "combinations thereof" per claims 1, 25, 28 and 33 constitutes indefinite subject matter as per it not being readily ascertainable as to how the latter further limits the former.

C) The recited "the polyvinyl chloride resin consists of monomers selected from the group consisting of vinyl chloride monomer, vinyl acetate monomer, hydroxyl-containing vinyl monomers, carboxylic acid-containing vinyl monomers" per claims 33 & 42 constitutes indefinite subject matter as per it not being known by any rules of Chemistry as to how a polymer can consist of "monomers" vs. "monomer units".

## Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1713

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 33 & 34 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takimoto et al (U.S. 5,438,083).

Takimoto et al teach water-based coating compositions, useful for coating metal substrates, wherein said compositions are defined, basically, as containing a colloidal particle dispersion and a melamine cyanurate, as a preferred embodiment (the Abstract, col. 1, lines 6-8, col. 5, lines 21-28 & col. 9, lines 16-19). Takimoto et al further specifically teach that the water-based coating compositions contain, as major components, resins which include water-soluble, water-dispersible or emulsified ones or mixtures thereof wherein examples of the water-soluble or water-dispersible resins include epoxy resins, urethane resins, aminoplast resins, etc. and the emulsified resins (aqueous resin emulsions) include vinyl chloride resins, epoxy resins and urethane resins (col. 9, lines 20-68 and col. 10, lines 1-8)). Takimoto et al further specifically teach that a crosslinking agent such as aminoplasts, blocked isocyanates, epoxy compounds, phenoplasts and amines can be incorporated into the water-based coating compositions (col. 10, lines 9-34). Takimoto et al further teach that additional conventional additives such as pigments, antifoaming agents, leveling agents, inhibitors, gloss agents, suspending agents, wetting agents (surfactants), lubricants, antiseptics and mildew-proofing agents can be incorporated into the water-based coating compositions (col. 12, lines 36-50 & col. 13, lines -18). See also the Runs and Claims 2 & 3. Takimoto et al therefore anticipate the instantly claimed invention with the understanding that the water-based coating compositions of Takimoto et al overlap in scope with the claimed waterborne coating composition, with the understanding that the resin mixture genus of Takimoto et al is sufficiently small enough to engender anticipation of the claimed invention (In re Schaumann, 572 F. 2d 312, 316, 197 USPQ 5, 9 (CCPA 1978)) and with the understanding that the "consisting essentially of" clause limits the scope of a claim to the specified ingredients and to those that do not materially affect the basic and novel characteristics of a composition. See also In re Janakirama-Rao, 317 F.2d 951, 954,

Art Unit: 1713

137 USPQ 893, 895-96 (CCPA 1963). If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. In re De Lajarte, 337 F.2d 870, 143 USPQ 256 (CCPA 1964).

It has been held that where applicants claims a composition in terms of function, property of characteristic where said function is not explicitly shown by the reference and where the Examiner has explained why the function, property or characteristics is considered inherent in the prior art, it is appropriate for the Examiner to make a rejection under both the applicable sections of 35 USC 102 and 35 USC 103 such that the burden is placed upon applicant to provide clear evidence that the respective compositions do, in fact, differ as provided for under the guise of In re Best, 195 USPQ 430, 433(CCPA 1977); In re Fitzgerald et al, 205 USPQ 594.

Even if it turns out that the Examiner has somehow missed the boat and the claimed invention is not anticipated by the disclosure of Takimoto et al, it would have been obvious to the skilled artisan to extrapolate, from Takimoto et al, the precisely defined waterborne coating composition, as claimed, as per such having been within the purview of the general disclosure of Takimoto et al and with a reasonable expectation of success.

#### Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 3, 7, 8, 25, 26 & 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takimoto et al (U.S. 5,438,083), alone, and further in combination with applicant's own admission, as evidenced by the Union Carbide Corporation Technical Product Bulletin(pp 1-24, 05, 1996).

Takimoto et al is relied on for all that is taught as set forth in the Grounds of Rejection supra as applied to claims 33 & 34. Further, Takimoto et al teach that a crosslinking agent is selected which undergoes a reaction with the reactive groups of the resin components in the water-based coating composition (7 & 8, col. 10, lines 23-34 & Runs 8-13).

Furthermore, while the "emulsified vinyl chloride resins" disclosed at col. 9, line 52 are generic to the claimed polyvinyl

Art Unit: 1713

chloride resin particles, such is a necessary implication that any emulsified vinyl chloride resin, including the claimed polyvinyl chloride resin particles, would have been operable within the scope of patentees invention and with a reasonable expectation of success. Moreover, applicant admits (paragraph bridging pages 4 & 5) that a commercially available resin such as UCAR Waterborne Vinyl AW-845 (Union Carbide) is a suitable polyvinyl chloride resin. Therefore, it would have been obvious to the skilled artisan to use a commercially available polyvinyl chloride resin, falling within the scope of the claimed invention as evidenced by the Technical Product Bulletin, in lieu of the emulsified vinyl chloride resins of Takimoto et al and with a reasonable expectation of obtaining equivalent results, absent a showing of criticality for such, commensurate in scope with the claims.

## Claim Rejections - 35 USC § 103

12. Claims 28-31, 33 & 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruske (U.S. 3,909,471). Ruske teaches colored surface coatings and plastics which contain an anthraquinoneoxadiazole pigment wherein the plastics, in the form of an aqueous organic emulsion, to be colored include polyvinyl chloride, flexible polyvinyl chloride copolymers of vinyl chloride such as vinyl chloride/vinyl acetate copolymers and other copolymers of vinyl chloride, amino resins such as those based on urea or melamine and formaldehyde, polyaddition resins such as epoxy or polyurethane resins and alkyd resins (Abstract, col. 1, lines 3-35, the Runs, especially Runs 5, 6 & 8, the claims, especially claims 1, 2 & 6).

The disclosure of Ruske differs basically from the claimed invention as per the non-specific disclosure of an embodiment directed to a composition comprising a) polyurethane resin particles, b) epoxy resin particles, c) polyvinyl chloride resin particles and d) a component, as claimed. However, based on their identified scope equivalency, one having ordinary skill in the art would have found it obvious to extrapolate the composition comprising a combination of a) + b) + c) and a component from Ruske as per such having been within the purview of the general disclosure of Ruske and with a reasonable expectation of success, absent a showing of unexpected results, clearly commensurate in scope with the claims.

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

Art Unit: 1713

The specification need not contain working examples if the invention is disclosed in such a manner that one skilled in the art would be able to practice it without an undue amount of experimentation(In re Borkowski, 162 USPQ 642).

It is well established that a reference is available for all it teaches including nonpreferred embodiments as for instance is discussed in M.P.E.P. § 2123. that is quoted in its entirety below (underlinings added).

As to any remaining dependent claim limitations, if not taught or suggested such would have been obvious to the skilled artisan and with a reasonable expectation of success, i.e., any additional or particular claim parameters which may not be specifically set out in the references are considered to be inherent in the reference products or not to involve anything unobvious absent a showing to the contrary.

The "consisting essentially of" clause limits the scope of a claim to the specified ingredients and to those that do not materially affect the basic and novel characteristics of a composition. See also In re Janakirama-Rao, 317 F.2d 951, 954, 137 USPQ 893, 895-96 (CCPA 1963). If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. In re De Lajarte, 337 F.2d 870, 143 USPQ 256 (CCPA 1964).

#### Claim Rejections - 35 USC § 103

13. Claims 1, 3, 6-8, 25, 26, 28-31, 33, 34 & 36-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotera et al(U. S. 4,340,519).

Kotera et al teach aqueous dispersions, useful as an aqueous binder for coating and surface treating agent, comprising (A) a crystalline polyester, (B), a non-crystalline polyester, (C) water-soluble organic compound & (D) water(Abstract, col. 2, lines 9-54 & col. 7, lines 41-48). Kotera et al further teach that the aqueous dispersion comprising (A), (B), (C) and (D) can be further incorporated with one or more crosslinking agents, with or without curing agents or crosslinking promoting agents, which include amino resins such as melamine resins, epoxy compounds, and isocyanate compounds(col. 6, lines 33-61 & col. 7, lines 30-40). Kotera et al further teach that the polyester resin-containing aqueous dispersion, useful as an aqueous binder for coating and incorporated with an amino resin such as a melamine resin can further contain curing agents which include acids such as toluenesulfonic acid, hydrochloric acid, etc.,



Art Unit: 1713

modifying agents which include an epoxy resin dispersion and a urethane resin dispersion(the paragraph bridging cols. 8 & 9). Kotera et al also teach that, as a surface treating agent, the polyester resin-containing aqueous dispersion can further incorporate a water-soluble resin and other conventional additives such as curing agents and promoters, aqueous resins such as polyvinyl chloride emulsion, self, emusifiable polyurethane, or the like(col. 9, lines 14-47). The disclosure of Kotera et al differs basically from the claimed invention as per the non-express disclosure of an embodiment directed to the specifically defined composition, as claimed. However, one having ordinary skill in the art would have found it obvious to extrapolate, from the disclosure of Kotera et al, the precisely defined composition, as claimed, as per such having been within the general purview of the disclosure of Kotera et al and with a reasonable expectation of success.

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). Furthermore, the recognition of a result flowing naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious, i.e., the so called improvement will flow from the suggestion in the prior art to make the modification(Ex parte Obiaya, 227 USPQ 58, 60 (Bd. Petchke et al. App. & Int. 1985).

While the polyurethane resin, epoxy resin and/or polyvinyl chloride resin is generic to the claimed polyurethane resin, epoxy resin and/or polyvinyl chloride resin, such is a necessary implication that any polyurethane resin, epoxy resin and polyvinyl chloride resin, including the claimed polyurethane resin, epoxy resin and polyvinyl chloride resin, would have been operable within the scope of patentees invention and with a reasonable expectation of success. Moreover, the use of any commercially available polyurethane resin, epoxy resin and/or polyvinyl chloride resin in the system of Kotera et al would have been obvious to the skilled artisan and with a reasonable expectation of success.

As to the remaining dependent claim limitations, if not taught or suggested, such would have been obvious to the skilled artisan and with a reasonable expectation of success, i.e., any additional or particular claim parameters which may not be specifically set out in the references are considered to be inherent in the reference products or not to involve anything unobvious absent a showing to the contrary.

Art Unit: 1713

The "consisting essentially of" clause limits the scope of a claim to the specified ingredients and to those that do not materially affect the basic and novel characteristics of a composition. See also *In re Janakirama-Rao*, 317 F.2d 951, 954, 137 USPQ 893, 895-96 (CCPA 1963). If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. *In re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA 1964).

## Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 28, 29 & 33 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bontinck et al (U.S. 5,541,251).

Bontinck et al teach aqueous self-crosslinkable resin compositions defined basically as containing an aqueous dispersion of at least one polyurethane polymer having anionic salt groups and at least one vinyl polymer having chain-pendant acetoacetoxyalkyl ester groups (Abstract, col. 1, lines 4-7, col. 2, lines 57-67, col. 3, lines 1-9 and 63-67, col. 4, lines 1-4, col. 6, lines 10-20). Bontinck et al further teach that the aqueous resin compositions, useful for the preparation of protective coatings, varnishes, etc, can include other additives, in order to impart or improve desirable properties or to suppress undesirable properties, which include other polymer dispersions such as epoxy resin dispersions and polyvinyl chloride dispersions (col. 10, lines 20-36). Bontinck et al therefore anticipate the instantly

Art Unit: 1713

claimed invention with the understanding that the aqueous polyurethane composition of Bontinck et al overlaps in scope with the claimed polyurethane resin-containing waterborne coating composition. Even if it turns out that the claims are not anticipated by the disclosure of Bontinck et al, it would have been obvious to the skilled artisan to extrapolate, from the disclosure of Bontinck et al, the precisely defined waterborne coating composition, as claimed, as per such having been within the purview of the general disclosure of Bontinck et al and with a reasonable expectation of success.

The "consisting essentially of" clause limits the scope of a claim to the specified ingredients and to those that do not materially affect the basic and novel characteristics of a composition. See also *In re Janakirama-Rao*, 317 F.2d 951, 954, 137 USPQ 893, 895-96 (CCPA 1963). If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. *In re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA 1964).

It has been held that where applicants claims a composition in terms of function, property of characteristic where said function is not explicitly shown by the reference and where the Examiner has explained why the function, property or characteristics is considered inherent in the prior art, it is appropriate for the Examiner to make a rejection under both the applicable sections of 35 USC 102 and 35 USC 103 such that the burden is placed upon applicant to provide clear evidence that the respective compositions do, in fact, differ as provided for under the guise of *In re Best*, 195 USPQ 430, 433 (CCPA 1977); *In re Fitzgerald et al*, 205 USPQ 594.

#### Response to Arguments

17. Applicant's arguments filed 11/04/04 have been fully considered but they are not persuasive.

Relative to New Matter added to the Specification---As far as the Examiner can tell, there are no alkoxy ester moieties pendant from the backbone of the polyvinyl chloride polymer depicted in the Figure 1 on page 3 of the UCAR Waterborne Vinyl AW-875 product bulletin. Furthermore, there is no support found for a polyvinyl chloride resin which is a chloride or a carboxylic acid-containing vinyl polymer.

Relative to the rejection of claims under 35 USC 112, first paragraph---As far as the Examiner can tell, there is no support found for a polyvinyl chloride resin consisting of alternative ester groups selected from an alkyl ester, alkoxy ester and carboxylic acid-containing ester or for a polyvinyl chloride resin which consists of alternative hydroxyl-containing vinyl monomers and carboxylic acid-containing vinyl monomers.

Relative to Ruske---The crux of Counsel's arguments appear to hinge on there being no teaching of combining epoxy resin particles, polyurethane resin particles and polyvinyl chloride resin particles. To this end, Counsel is cordially directed to at least claim 1 which recites the coating or plastic material is a polymer selected from the group consisting of at least polyvinyl chloride, amino resins based on urea or melamine and formaldehyde, epoxy resins and polyurethane resins which is deemed sufficient to dispel any confusion as to the interpretation of col. 1, lines 19-35. Counsel is herein reminded that a reference is evaluated, as a whole for what it fairly teaches and is not limited to just bits and pieces. It is urged and maintained that the instantly claimed invention is obvious within the meaning of 35 USC 103 over Ruske as per reasons clearly stated in the Grounds of Rejection supra.

Relative to Kotera et al---The crux of Counsel's arguments appears to hinge on the polyester resin of Kotera is precluded by the "consisting essentially of" clause per the claimed invention. To this end, the "consisting essentially of" clause limits the scope of a claim to the specified ingredients and to those that do not materially affect the basic and novel characteristics of a composition. See also *In re Janakirama-Rao*, 317 F.2d 951, 954, 137 USPQ 893, 895-96 (CCPA 1963). If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. *In re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA 1964). There is absolutely nothing viable on this record to diffuse this issue.

Relative to Bontinck et al---The crux of Counsel's arguments appear to hinge on the vinyl polymer of Bontinck having a chain-pendant acetoacetoxyalkyl ester group is precluded from the present claims, as amended. To this end, the claims, in their present form, simply don't preclude the vinyl polymer having chain-pendant acetoacetoxyalkyl ester groups, as apparently believed by Counsel. The "consisting essentially of" clause limits the scope of a claim to the specified ingredients and to those that do not materially affect the basic and novel characteristics of a composition. See also *In re Janakirama-Rao*, 317 F.2d 951, 954, 137 USPQ 893, 895-96 (CCPA 1963). If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has

Art Unit: 1713

the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. In re De Lajarte, 337 F.2d 870, 143 USPQ 256 (CCPA 1964). There is absolutely nothing viable on this record to diffuse this issue.

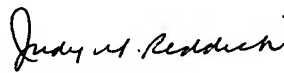
Conclusion


18. The additional prior art, listed on the attached FORM PTO 892, is cited as of being illustrative of the general state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (571) 272-1110. The examiner can normally be reached on 6:00 a.m. - 2:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Judy M. Reddick  
Primary Examiner  
Art Unit 1713

JMR   
01/19/05